

SUPPLEMENTAL EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Charles Kosinski on 03/09/2010.
3. Applicant agreed to amend Claim 12 to include the text of Claim 1 to avoid making reference to two different claims.

Claim 12 has been amended as follows:

An arrangement as claimed in claim 11, wherein it is designed for carrying out a method ~~as claimed in claim 1~~ comprising:

a) detecting a movement signal which represents movement phases of a periodic internal movement of the body, wherein the movement signal comprises both (i) an electrocardiogram movement signal and (ii) a breathing movement signal;

b) generating 2D images of a body volume of interest, and storing each 2D image in an image database together with (i) associated imaging parameters and (ii) an associated movement phase;

c) measuring (i) a current spatial position of the instrument and (ii) a corresponding movement phase of the periodic internal movement of the body comprising (ii)(a) an electrocardiogram movement signal and (ii)(b) a breathing movement signal;

d) selecting at least one 2D image from the image database, wherein selecting the at least one 2D image takes place only in response to ascertaining whether (i) the at least one 2D image's associated movement phase corresponds to (ii) the movement phase belonging to the current measured spatial position of the instrument, otherwise the selecting does not take place;

e) determining the position of the instrument on the at least one selected 2D image, wherein determining the position of the instrument on the at least one selected 2D image includes using interpolation to calculate a superposed position of the instrument on the 2D image, and wherein determining further includes compensating for a breathing-induced movement of a given body part within the body volume of interest based on a measured breathing position using a movement model of the body part; and
(f) superposing the determined position of the instrument on the at least one selected 2D image.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENE BOR whose telephone number is (571)272-2947. The examiner can normally be reached on M-T 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. B./
Examiner, Art Unit 3768

/Eric F Winakur/
Primary Examiner, Art Unit 3768